

REMARKS

The Office Action mailed June 9, 2009, made final, has been carefully reviewed. Claims 43-45 and 47-67 were examined. With this amendment, formerly pending Claims 43-45 and 47-67 are canceled, and new Claims 68-72 are presented. For the reasons set forth more specifically below, Applicants submit that the presented claims are patentable over the cited art of record. Applicants' claims are directed to a process for producing a fiber cellulose fiber reinforced cement composite material consisting of individualized cellulose fibers to about 400 to 500 CSF in which a defined amount of the fibers is pre-treated with a sizing agent under specific conditions. A defined amount of the treated fibers is mixed with a specific composition of cementitious binder and ground silica to form a fiber cement mixture that is formed into a fiber cement article and subsequently processed under specific conditions to form an improved sized fiber cement article.

Rejections under 35 U.S.C. § 112

Claims 43-45 and 47-67 were rejected under § 112, first paragraph, for failing to comply with the written description requirement. The basis of the rejection is that a text search of the application failed to identify the various claim limitations, thereby applying a requirement for literal support. Applicant is aware of no authority for a requirement of literal support under 35 U.S.C. § 112, first paragraph, and the Examiner's application of such a standard appears to be an arbitrary application of the patent rules. In accordance with MPEP §2163.04, it is understood by the Applicant that a description is presumed to be adequate unless the Examiner has demonstrated "why a person of ordinary skill in the art would not recognize in applicant's disclosure a description of the invention defined by the claims." Although Applicant submits that the Examiner has not met his burden, in the interest of advancing prosecution of this application, the rejected claims have been canceled and the pending rejection is moot.

Rejections under 35 U.S.C. § 103

Claims 43- 45, 47-48, 50-63, 66, and 67 were rejected as being obvious under 35 U.S.C. § 103 in view of *Ulfstedt*, *Rozman*, and *Naji*. The claims have been canceled and their rejection is moot.

New Claims

New Claims 68 through 72 find support in Examples 1 through 5 in particular and paragraphs [0086-0194] in general. New Claims 68 through 72 are believed patentably distinguishable over the art of record as discussed with particularity below.

Ulfstedt, to mitigate the cracking otherwise observed during the steam curing process, provides a method of steam curing porous light weight concrete using slow-hydrating burnt magnesite or similar mineral binder (burnt dolomite) to react with lime to form calcium hydrosilicates to reduce cracking during curing.

Rozman, to determine the effects of γ -aminopropyltriethoxysilane on wood fibers, chemically modified wood fibers with γ -aminopropyltriethoxysilane followed by blending with urea formaldehyde (UF) resin and a catalyst. *Rozman* discloses fibers treated with γ -aminopropyltriethoxysilane solution for 3 hours at room temperature, drained and dried at 110° C for 5 hours to yield dried treated fibers. The dried treated fibers are mixed with 12% UF resin in solution (per fiber dry weight) and 2% catalyst per UF weight percent. The treated fiber content and the identity of the catalyst are not disclosed. The fiber-resin-catalyst mixture is cured at 150° C for 15 minutes to a density of 0.75 to 0.78 g/cm³. Low γ -amino-propyl-triethoxysilane content of the fibers (the Weight Percent Gain, or WPG) actually increased water absorption (see FIG. 7) and adversely affects precure of the mixture (see p. 254). *Rozman* notes that the addition of the silane did not increase MOR due to the differing fiber content that “plays a predominant role in determining the improvement in the MOR of the product.” (see p. 253). *Rozman* notes that “at lower modification [i.e., silane content of the fibers], silane somehow interfered with the cure of UF in the board.” (see p. 254), and “caused premature curing of UF.” (see p. 257) As shown in FIG. 6, the silane content of the fibers was highly correlated with reversible swelling of the products (6 of the 7 data points) and profoundly non-linear for irreversible swelling (see FIG. 7). Silane causes one product having an unknown fiber content (Type I) to be *hydrophilic* at 28 WPG then sharply *hydrophobic* at 31 WPG (on a 60-point scale). The second product, having a different but also unknown fiber content (Type II) is only hydrophilic. The data suggest that a product modified with a silane can cause a product to be *hydrophilic* dependent on fiber content. In other words, silane’s effects are (1) concentration-dependent but unpredictable, and (2) dependent on fiber content.

Naji, to provide an autoclave cured cementitious product, discloses a product containing a dehydroxylated clay mineral, *e.g.*, metakaolin, that overall possesses low water permeability. Applicant respectfully submits that one of ordinary skill in the art would look to *Naji* as a whole as providing a cementitious *composition* having a low water permeability, and since the cementitious composition exhibits lower water permeability, there would be no motivation to combine *Naji* with *Rozman* treated fibers, generally, and particularly in view of *Rozman*'s findings of silane's unpredictable, non-linear, and unpredictable effects at self-described low silane concentrations. The pending Office Action notes that *Ulfstedt* states that "[i]n addition, fillers of different kinds and setting and hardening regulators, such as sugar and gypsum, may be added" to provide the requisite motivation to combine *Ulfstedt* with *Rozman*. Applicant respectfully submits that one of ordinary skill would view that statement as referring to fillers as compounds for increasing the setting or hardening of the cement. Applicant respectfully submits that there is no teaching in the prior art of record absent impermissible hindsight that would reasonably motivate a person of ordinary skill in the art to combine *Ulfstedt*'s composition with *Rozman*'s silane-treated cellulose fibers.

Applicant has made an effort to advance the prosecution of this application by canceling claims and pointing out with particularity the features which are believed to distinguish the claims over the prior art. A Notice of Allowance of Claims 68 through 72 is respectfully solicited.

CONCLUSION

The fee for a three-month extension of time is being provided via credit card payment at the time of filing. To the extent that any further fees are required during the pendency of this Application, including petition fees, the Commissioner is hereby authorized to charge payment of any additional fees, including, without limitation, any fees under 37 C.F.R. § 1.16 or 37 C.F.R. § 1.17, to Deposit Account No. 07-0153 of Gardere Wynne Sewell LLP and reference Attorney Docket No. 129843-1030. In the event that any additional time is needed for this filing, or any additional time in excess of that requested in a petition for an extension of time, please consider this a petition for an extension of time for any needed extension of time pursuant to 37 C.F.R. § 1.136 or any other section or provision of Title 37. Applicants respectfully request that the Commissioner grant any such petition and authorize the Commissioner to charge the Deposit Account referenced above. Please credit any overpayments to this same Deposit Account.

This is intended to be a complete response to the Office Action mailed June 9, 2009.

**Please direct all correspondence to the practitioner listed below at Customer No.
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Respectfully submitted,

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